

# <u>COURSE OVERVIEW IE0711-4D</u> <u>GWR Level Transmitter, Process Measurement Products III Level &</u> <u>HART Radar Level Transmitter</u>

### Course Title

GWR Level Transmitter, Process Measurement Products III Level and HART Radar Level Transmitter

#### Course Date/Venue

September 09-12, 2024/TBA Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

Course Reference

<u>Course Duration/Credits</u> Four days/2.4 CEUs/24 PDHs

# Course Description









This practical and highly-interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.

This course is designed to provide participants with a detailed and up-to-date overview of GWR level transmitter, process measurement products III level and HART radar level transmitter. It covers the liquid and non-solid level industrial measurement aspects; the guided wave level measurement technology; the product features and competition advantages; and the concepts and technical application including dielectric constant, electromagnetic waves behavior, wrap curves and graphic sensibility.

During this interactive course, participants will learn the product installation details; the RD400 operation and configuration; the specification of RD400 dead band, range and probe types, probe types, spare and accessories; the device troubleshooting using CONF401 software; and the product ordering code.



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## Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Apply and gain an in-depth knowledge on GWR level transmitter troubleshooting and maintenance
- Discuss liquid and non-solid level industrial measurement aspects
- Recognize guided wave level measurement technology
- Identify product features and competition advantages
- Recognize the concepts and technical applications as well as dielectric constant, electromagnetic waves behavior, wrap curves and graphic sensibility
- Review product installation details and carryout RD400 operation and configuration
- Specify RD400 dead band, range and probe types, probe types, spare and accessories
- Apply device troubleshooting using CONF401 software and product ordering code

# Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive "Haward Smart Training Kit" (H-STK<sup>®</sup>). The H-STK<sup>®</sup> consists of a comprehensive set of technical content which includes electronic version of the course materials, sample video clips of the instructor's actual lectures & practical sessions during the course conveniently saved in a Tablet PC.

#### Who Should Attend

This course provides a basic overview of all significant aspects and considerations of GWR level transmitter troubleshooting and maintenance for those individuals with knowledge in industrial automation and computers.

#### Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30% Lectures
20% Practical Workshops & Work Presentations
30% Hands-on Practical Exercises & Case Studies
20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

#### Course Fee

**US\$ 4,500** per Delegate + **VAT**. This rate includes H-STK<sup>®</sup> (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.



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# Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

#### **Certificate Accreditations**

Certificates are accredited by the following international accreditation organizations: -



The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **2.4 CEUs** (Continuing Education Units) or **24 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

## **Accommodation**

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.



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#### Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:

Dr. Mike Tay, PhD, MSc, BSc, is a Senior Electrical, Instrumentation &



Communications Engineer with over 40 years of extensive experience. His expertise widely covers Process Control & Instrumentation, Process Control Troubleshooting & Problem Solving, Process Control System, Loss Control System, Advanced Process Control (APC) Technology, Process Control & Loop Tuning, Flow Measurement, Multiphase Metering, Custody Measurement & Loss Control, Process Control & Automation, Control System Interface, Distributed Control Systems (DCS), Programmable Logic Controller (PLC), Supervisory Control and Data Acquisition (SCADA), SCADA Security, SCADA System Monitoring & Analysis, Pump Performance Analysis, Pump Control Strategies, Smart Control Strategies, Data Accuracy & System Function, Network Comprehensive, Systems Analysis, ESD System Function, Analysis & Control, Modern Power Systems Protective Relaying, Fiber Optics Access Network Planning, Process Analyzer & Analytical Instrumentation, HV/MV Substation Design & Maintenance, Combined Cycle Power Generation, PLC & SCADA Automation, Advanced Online Analyzer, Protection Relay Maintenance, Power System Faults, Current & Voltage Transformers, Power System Neutral Grounding, Feeder Overcurrent Protection, Electrical Protection Systems, Bus Protection, Motor Protection, Transformer Protection, Generator Protection, Numerical Relays, ESD System Analysis & Control, Custody Measurement, Safety Instrumented System (SIS), Safety Integrity Level (SIL), Interruptible Power Systems (UPS), Power System, Power Supply Design Management, Diesel Generator, Electric Motors and Basic Electricity & Electrical Codes. Further, he is also well-versed in Communications, Telecommunications, IT Service Management, IT Service Management Strategy, Information Technology Architectures, IT Maintenance, Mobile Protocols, 4G LTE, GSM/UMTS, CMDA2000, WIMAX Technology, HSPA+, Alarm Management System, Computer Architecture, Logic & Microprocessor Design, Embedded Systems Design plus Computer Networking with CISCO, Network Communication, Industrial Digital Communication, Designing Telecommunications Distribution System, Electrical Engineering, WiMAX Broadband Wireless System, TT Intranet & ADSL Network, TT Web & Voicemail, Off-site ATM Network, Say2000i, IP Phone, National Address & ID Automation, Electricity Distribution Network, Customs Network & Maintenance, LAN & WAN Network, UYAP Network, Network Routing Protocols, Multicast Protocols, Network Management Protocols, Mobile & Wireless Networks and Digital Signal Processing.

During his career life, Dr. Tay worked with various universities and institutions such as the KOC Sistem, Meteksan Sistem, Altek BT, Yasar University, Dokuz Eylul University and METU and occupied significant positions being the Aegean Region Manager, Group Leader, Technical Services Manager, Field Engineer, Instrumentation & Control Engineer, Research Assistant, Instructor, Instrumentation & Control Instructor, Technical Advisor, Technical Consultant and Senior Instructor/Lecturer.

Dr. Tay has PhD, Master and Bachelor degrees in Electrical & Electronics Engineering from the Dokuz Eylul University and the Middle East Technical University (METU) respectively. Further, he is a Certified Instructor/Trainer, a Certified Internal Verifier/Assessor/Trainer by the Institute of Leadership & Management (ILM), a Certified CISCO (CCSP, CCDA, CCNP, CCNA, CCNP) Specialist, a Certified CISCO IP Telephony Design Specialist, CISCO Rich Media Communications Specialist, CISCO Security Solutions & Design Specialist and Information Systems Security (INFOSEC) Professional. He has further hold certification in Fundamentals of Process Control and Understanding Process Control: An Overview and delivered and presented innumerable trainings, courses, workshops, seminars and conferences worldwide.



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#### **Course Program**

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1:	Monday, 09 <sup>th</sup> of September 2024
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 - 0930	Liquid & Non-Solid Level Industrial Measurement Aspects
0930 - 0945	Break
0945 - 1100	Guided Wave Level Measurement Technology
1100 - 1230	<b>Product Features &amp; Competition Advantages</b>
1230 - 1245	Break
1245 – 1420	Product Features & Competition Advantages (cont'd)
1420 - 1430	Recap
1430	Lunch & End of Day One

Day 2:	Tuesday, 10 <sup>th</sup> of September 2024
0730 - 0930	Concepts & Technical Applications
0930 - 0945	Break
0945 - 1100	Dieielectric Constant
1100 – 1230	Electromagnetic Waves Behavior
1230 – 1245	Break
1245 - 1420	Wrap Curves & Graphic Sensibility
1420 - 1430	Recap
1430	Lunch & End of Day Two

Day 3:	Wednesday, 11 <sup>th</sup> of September 2024
0730 – 0930	Product Installation Details
0930 - 0945	Break
0945 - 1100	RD400 Operation & Configuration
1100 – 1230	How to Specify RD400, Dead Band, Range, Probe Types & Spare &
	Accessories
1230 - 1245	Break
1245 – 1420	How to Specify RD400, Dead Band, Range, Probe Types & Spare &
	Accessories (cont'd)
1420 - 1430	Recap
1430	Lunch & End of Day Three

Day 4:	Thursday, 12 <sup>th</sup> of September 2024
0730 - 0930	Device Troubleshooting Using CONF401 Software
0930 - 0945	Break
0945 - 1100	Device Troubleshooting Using CONF401 Software (cont'd)
1100 - 1230	RD400 Case Studies for Project Application
1230 - 1245	Break
1245 - 1345	Product Ordering Code
1345 – 1400	Course Conclusion
1400 – 1415	POST-TEST
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course



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# Practical Sessions

This practical and highly-interactive course includes real-life case studies and exercises:-



# Course Coordinator

Mari Nakintu, Tel: +971 2 30 91 714, Email: mari1@haward.org



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